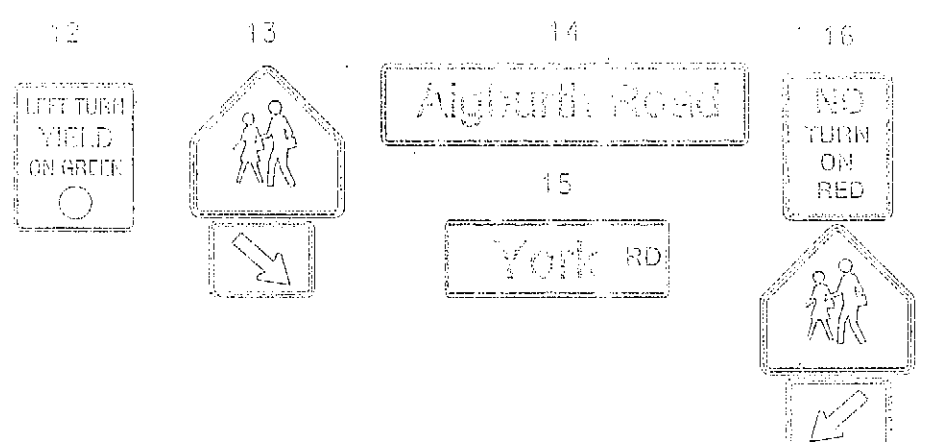
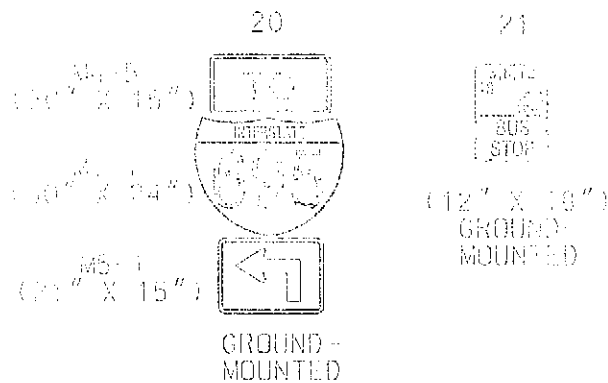


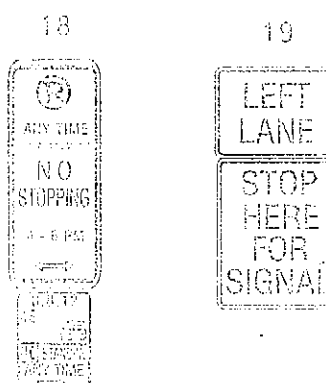
MD 45 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.



EXISTING SIGNS TO BE RELOCATED

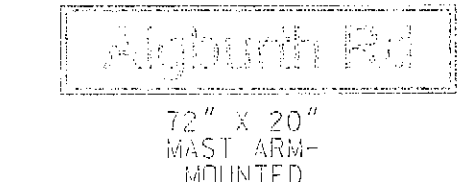


EXISTING SIGNS TO REMAIN

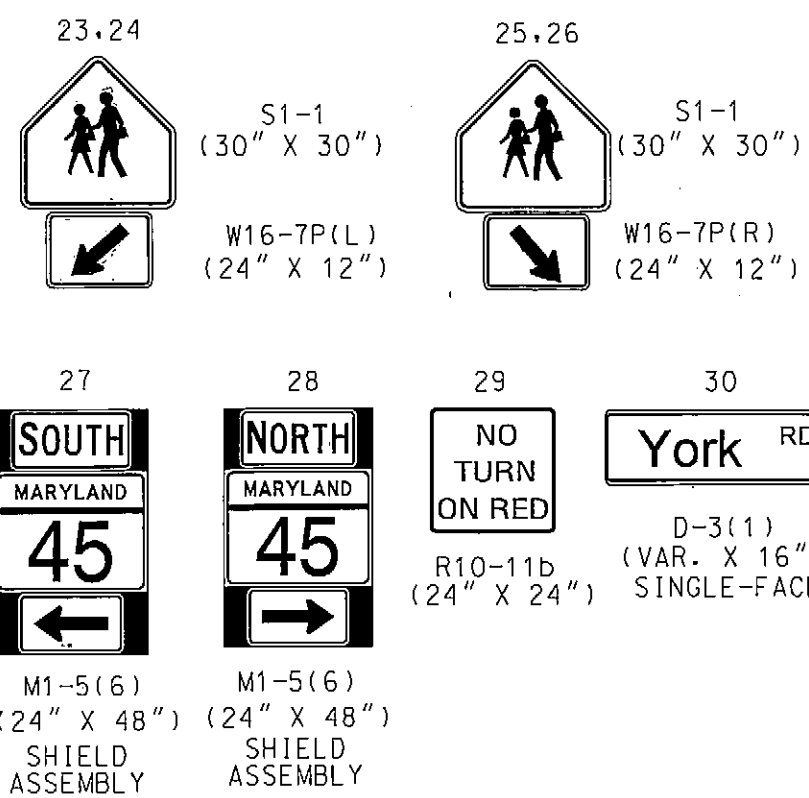


TOD NO. X4725.05  
SHA NO. B4087851  
MD 45 @ Aigburth Road

EXISTING ILLUMINATED SIGN TO BE RELOCATED



### PROPOSED SIGNS



### VIDEO DETECTION CAMERA

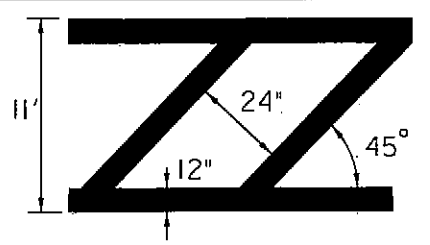
a,b,c,d

### VIDEO ZONE DETECTION

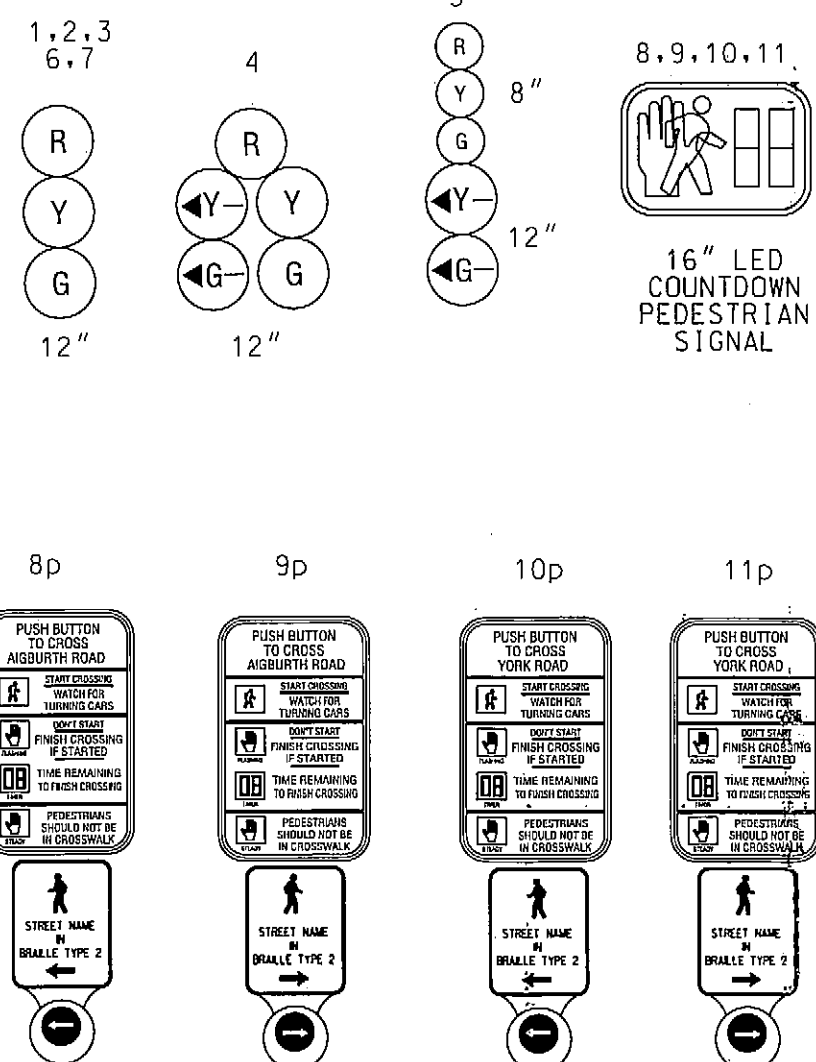
a,b

c,d

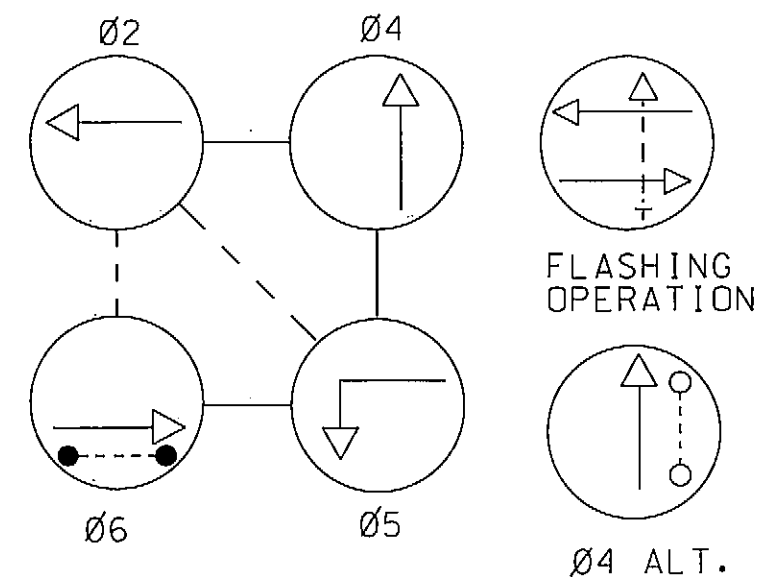
### CROSSWALK DETAIL



### PROPOSED SIGNALS



### NEMA PHASING



### NEMA NOTES:

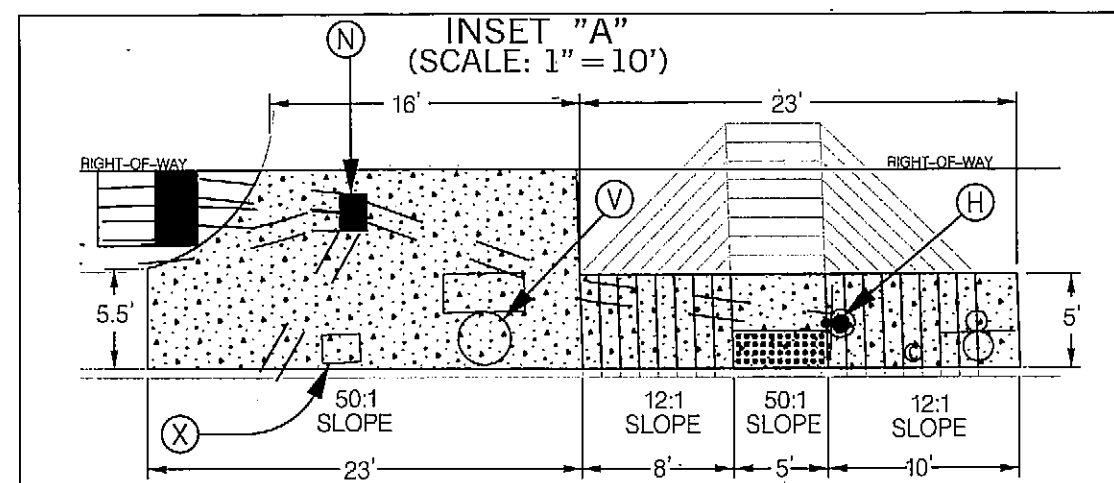
1. PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
2. PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.
3. ALTERNATE SEQUENCE PHASE 5 SHALL LAG PHASE 6.

### GENERAL NOTES

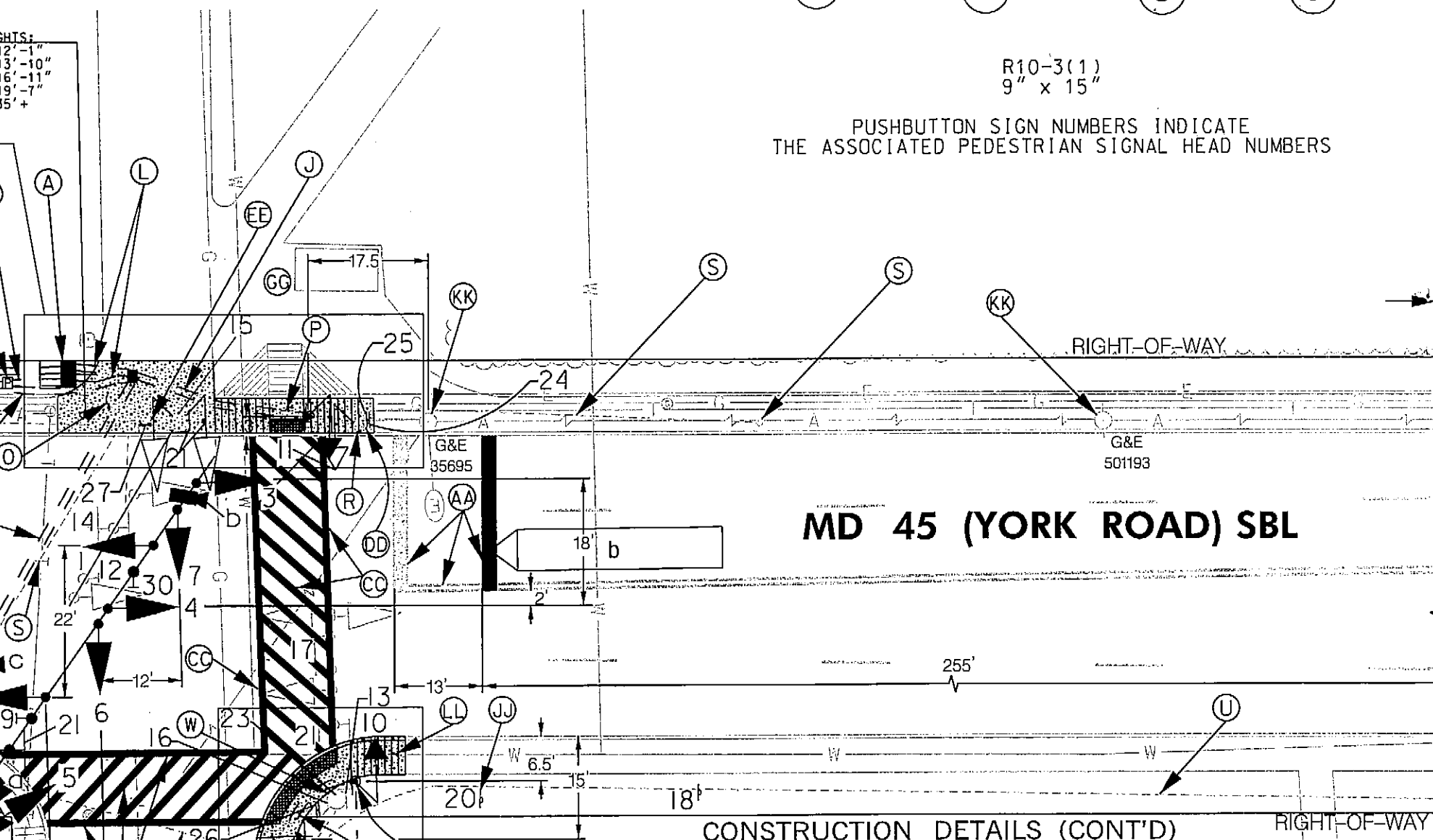
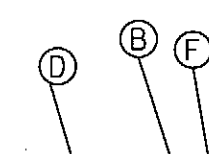
1. VIDEO CAMERA LOCATION/ALIGNMENT SHALL BE COORDINATED WITH THE SHA ENGINEER.
2. THE CONTRACTOR SHALL VERIFY ALL PROPOSED POLE AND CABINET LOCATIONS PRIOR TO INSTALLATION.
3. ALL PAVEMENT MARKINGS ARE TO BE INSTALLED IN ACCORDANCE WITH MDMUTCD AND MSHA STANDARDS.
4. ALL EXISTING TRAFFIC SIGNAL EQUIPMENT REMOVED SHALL BECOME THE PROPERTY OF THE SIGNAL CONTRACTOR UPON COMPLETION OF THE NEW SIGNAL.
5. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING UNUSED CABLES FROM EXISTING HANDHOLES AND CONDUITS UTILIZED FOR REVISION.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TERMINATING ALL SIGNAL CABLE TO THE APPROPRIATE TERMINAL AND FOR PROPERLY LABELING EACH CABLE.
7. THE CONTRACTOR SHALL VERIFY ALL UNDERGROUND UTILITY LOCATIONS. IF ANY CONFLICTS ARISE BETWEEN THE UTILITIES AND THE PROPOSED SIGNAL EQUIPMENT, THE CONTRACTOR SHALL STOP WORK AND CONTACT THE PROJECT ENGINEER.
8. ALL TRAFFIC SIGNAL FOUNDATIONS SHALL BE INSTALLED AT THE FINAL SIDEWALK OR CURB GRADE FOR CLOSED SECTIONS, AND THE HIGHEST ROADWAY PROFILE GRADE FOR OPEN SECTIONS, TO MEET CLEARANCES AS SPECIFIED IN MD 816.03, MD 818.01, MD 818.02, AND MD 818.04. THE CONTRACTOR SHALL VERIFY ULTIMATE GRADES PRIOR TO THE INSTALLATION OF ALL SIGNAL EQUIPMENT.
9. PUSHBUTTON ARROWS ARE TO BE PARALLEL TO THE CROSSING FOR WHICH THEY ARE INTENDED. THE 10' SEPARATION BETWEEN PUSHBUTTONS IS MEASURED FROM FACE OF PUSHBUTTON TO FACE OF PUSHBUTTON, NOT CENTER TO CENTER OF POLES.
10. PUSHBUTTONS ARE TO BE LOCATED SO THAT THEY CAN BE ACTIVATED BY A PERSON IN A WHEELCHAIR, REACHING LESS THAN 18 INCHES FROM A 60" X 60" LEVEL LANDING AREA WITH A CROSS SLOPE OF LESS THAN OR EQUAL TO 2%.
11. LOCATION OF ACCESSIBLE PEDESTRIAN SIGNAL PUSHBUTTONS MUST MEET LOCATION REQUIREMENTS OF MDMUTCD SECTION 4E-09 TO 4E-13 AND FIGURE 4E-3 AND 4E-4, AND THE NCHRP PUBLICATION, "ACCESSIBLE PEDESTRIAN SIGNALS: GUIDE TO BEST PRACTICE". IF NOT MET, THE CONTRACTOR IS TO STOP WORK ON PUSHBUTTON LOCATIONS UNTIL A DESIGN WAIVER IS OBTAINED, APPROVED BY THE DIRECTOR OF THE OFFICE OF TRAFFIC AND SAFETY.

### CONSTRUCTION DETAILS

- A. INSTALL NEMA TYPE "S" BASE-MOUNTED CABINET AND CONTROLLER WITH BATTERY BACK-UP AND ALL NECESSARY EQUIPMENT.
- B. INSTALL 100 AMP EMBEDDED METERED SERVICE PEDESTAL.
- C. INSTALL 3" SCHEDULE 80 RIGID PVC RISER AND ONE (1) 4" CONDUIT 1' STUB UP AT THE EXISTING BG&E POLE (G&E 462768) FOR THE PROPOSED SERVICE FEED. DISCONNECT EXISTING INTERCONNECT CABLE FROM EXISTING CABINET, PULL BACK TO THIS BG&E POLE AND RE-ROUTE TO PROPOSED CABINET AND CONTROLLER (SEE CONSTRUCTION DETAIL "D").
- D. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT (TRENCHED) FOR RE-ROUTING EXISTING INTERCONNECT CABLE TO THE PROPOSED CONTROLLER.
- E. 4" SCHEDULE 80 RIGID PVC CONDUIT FOR SERVICE FEED - TRENCHED
- F. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT FOR METERED SERVICE - TRENCHED.
- G. INSTALL 27' UPRIGHT AND 60' MAST ARM (AT 125° ANGLE TO MD 45) WITH LED TRAFFIC SIGNAL HEADS, LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE PUSHBUTTON STATION, VIDEO DETECTION CAMERAS, 3" WEATHERHEAD, 20' LIGHTING ARM WITH LED LAMP AND LUMINAIRE AND SIGNS (NOTE: ONE (1) 3" SCHEDULE 80 PVC, 90° BEND). VIDEO DETECTION CAMERAS 'c' AND 'd' SHALL BE INSTALLED ON THE LIGHTING ARM ATTACHED TO THE SIGNAL POLE (STD. MD 818.20). INSTALL BACK-CURB AND 5" CONCRETE APRON AROUND THE SIGNAL POLE FOUNDATION.
- H. INSTALL 10' PEDESTAL POLE AND FOUNDATION WITH LED COUNTDOWN PEDESTRIAN SIGNAL HEAD, AUDIBLE PUSHBUTTON STATION AND SIGN (NOTE: 18" DIA. X 36" HEIGHT FOUNDATION WITH ONE (1) 2" SCHEDULE 80 PVC, 90° BEND).
- J. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- K. INSTALL 3" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- L. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED.
- M. INSTALL 4" SCHEDULE 80 RIGID PVC CONDUIT - BORED.
- N. INSTALL ELECTRICAL HANDHOLE.
- O. REMOVE EXISTING SIDEWALK FOR INSTALLATION OF CONDUITS. ONCE PROPOSED TRAFFIC EQUIPMENT AND CONDUITS ARE INSTALLED, RECONSTRUCT SIDEWALK TO PREVIOUS CONDITION (SEE INSET A).
- P. REMOVE EXISTING RAMP SECTION FOR INSTALLATION OF CONDUIT. ONCE PROPOSED TRAFFIC EQUIPMENT AND CONDUIT ARE INSTALLED, RECONSTRUCT RAMP SECTION TO PREVIOUS CONDITION WITH NEW DETECTABLE WARNING SURFACE (MD STD. 665.40) (SEE INSET "A").
- R. REMOVE EXISTING HANDHOLE (CAP AND ABANDON ALL CONNECTED CONDUITS), PEDESTAL POLE (WITH FOUNDATION REMOVED 12" BELOW GROUND GRADE). REPLACE AREA WITH RAMP SECTION (SEE INSET "A").

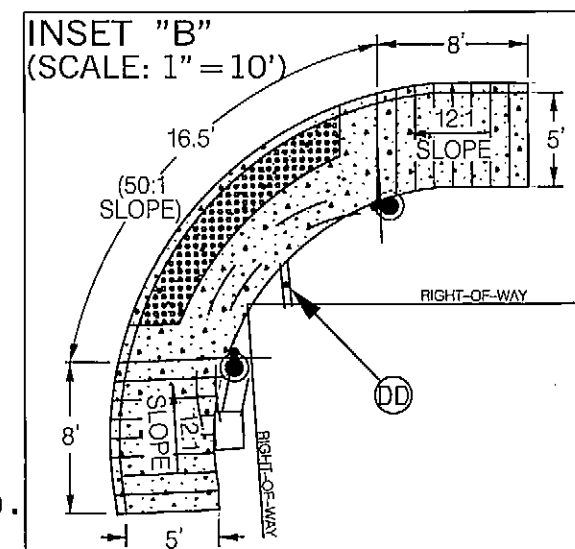


### INSET "A"



### CONSTRUCTION DETAILS (CONT'D)

- X. REMOVE EXISTING HANDHOLE; CAP AND ABANDON CONDUIT (PERFORM AFTER CONSTRUCTION DETAIL "Y").
- Y. USE EXISTING HANDHOLE. DISCONNECT EXISTING INTERCONNECT CABLE FROM EXISTING CABINET AND PULL BACK TO THIS HANDHOLE. RE-ROUTE EXISTING INTERCONNECT CABLE THROUGH PROPOSED CONDUIT TO THE PROPOSED CONTROLLER (PERFORM BEFORE DETAIL "S").
- Z. REMOVE EXISTING PAVEMENT MARKINGS AND INSTALL 24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR STOP LINE 30' AWAY FROM THE EXISTING STOP LINE. CONDUIT INSTALLATION MUST BE COMPLETED PRIOR TO THE INSTALLATION OF THE STOP LINE MARKINGS.
- AA. REMOVE EXISTING PAVEMENT MARKINGS (STOP LINE AND CENTER LINE) AND INSTALL 24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING FOR STOP LINE, 13' AWAY FROM THE EXISTING STOP LINE.
- BB. INSTALL 24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR STOP LINE (SAME LOCATION).
- CC. REMOVE EXISTING PAVEMENT MARKINGS (NOT SHOWN) AND INSTALL 12" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS FOR CROSSWALK IN THE SAME LOCATION (SEE CROSSWALK DETAIL FOR INSTALLATION OF CROSSWALK HATCHING).
- DD. INSTALL PROPOSED SIGN(S) ON ONE (1) 4" X 6" WOOD SIGN SUPPORT.
- EE. INSTALL PROPOSED SHIELD ASSEMBLY ON TWO (2) 4" X 4" WOOD SIGN SUPPORTS.
- FF. REMOVE EXISTING SIDEWALK FOR INSTALLATION CONDUIT RUNS. ONCE CONDUITS ARE INSTALLED, REPLACE AREA WITH 5" CONCRETE SIDEWALK.
- GG. RELOCATE EXISTING POLE-MOUNTED "BUS STOP" SIGN (#21) TO NEW LOCATION ON ONE (1) 4" X 4" WOOD SIGN SUPPORT.
- HH. INSTALL 2" SCHEDULE 80 RIGID PVC CONDUIT FOR LIGHTING EQUIPMENT - TRENCHED.
- JJ. RELOCATE EXISTING GROUND-MOUNTED TRAILBLAZER SIGN (#20) AND INSTALL UNDER EXISTING SIGN (#31) ON WOOD SIGN SUPPORT.
- KK. REMOVE EXISTING ABANDONED OVERHEAD INTERCONNECT CABLE FROM ALL EXISTING UTILITY POLES.
- LL. REMOVE EXISTING RAMP SECTION FOR INSTALLATION OF CONDUIT. ONCE PROPOSED TRAFFIC EQUIPMENT AND CONDUIT ARE INSTALLED, CONSTRUCT NEW RAMP SECTION WITH NEW DETECTABLE WARNING SURFACE (MD STD. 665.40) (SEE INSET "B").



- S. REMOVE ALL EXISTING UNUSED WIRING. ABANDON ALL EXISTING UNUSED HANDHOLES, CONNECTED CONDUITS AND EQUIPMENT.
- T. USE EXISTING HANDHOLE.
- U. USE EXISTING CONDUIT.
- V. REMOVE EXISTING MAST ARM, CONTROLLER CABINET, SIGNAL POLE AND ALL ASSOCIATED EQUIPMENT; REMOVE FOUNDATION 12" BELOW GROUND GRADE.
- W. REMOVE EXISTING MAST ARM, SIGNAL POLE AND ALL ASSOCIATED EQUIPMENT; REMOVE FOUNDATION 12" BELOW GROUND GRADE.

**CENTURY**  
ENGINEERING  
CONSULTING ENGINEERS - PLANNERS  
10710 GILROY ROAD  
HUNT VALLEY, MD 21031

REVISION 'E' CBI PROJECT NO. 101095.90

RIGHT-OF-WAY DATA	APPROVALS	REVISIONS
PLAT NO.: CARDIFF HALL EAST APMTS. E.H.K., JR. 38 FOLIO 38 MSN SSU 1236-8772	TEAM LEADER ASST. DIV. CHIEF DIVISION CHIEF OFFICE DIRECTOR	(E) RECONSTRUCT EXISTING SIGNAL CONTRACT NO. X12553185 MAY 23, 2013 END (F) REPLACE EXISTING SIGNAL HEADS ADD VIDEO DETECTION SHA NO. B4087851 TIMES # 1728 URS (G) PED SIGNALS & PUSH BUTTON 12/11/19 E/S/VERT

RIGHT-OF-WAY INFORMATION SHOWN WAS OBTAINED FROM SHA PLAT RECORDS AND IS CURRENT AS OF DEC. 20, 1974.
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TRAFFIC SIGNAL PLAN			
SCALE: 1" = 20'. ADVERTISED DATE: 2/25/1970. CONTRACT NO. B-120 X-475			
DESIGNED BY	Wm. MUNK	COUNTY	BALTIMORE
DRAWN BY		LOGMILE	03004501.50
CHECKED BY		TIMS NO.	
F.A.P. NO.		TOD NO.	
TS NO. 159E	DRAWING SG-01	OF 2	SHEET NO. 1 OF 2

PLOTTED: Thursday, May 23, 2013 AT 03:58 PM  
FILE: \\vtnhfile\h\Projects\2012\Transportation\101095.90 - MD 45 (York Road) at Aigburth Road\CADD\ACAD Sheet\SG-P003-MD45Aigburth.dgn